

## OPINION 1890

***Scarabaeus rufus* Moll, 1782 (currently *Aphodius rufus*), *Scarabaeus rufus* Fabricius, 1792 (currently *Aegialia rufa*) and *Scarabaeus foetidus* Herbst, 1783 (currently *Aphodius foetidus*) (Insecta, Coleoptera): specific names conserved**

**Keywords.** Nomenclature; taxonomy; Coleoptera; SCARABAEIDAE; CETONIINAE; APHODIINAE; AEGIALIINAE; scarab beetles; *Dischista rufa*; *Aphodius rufus*; *Aegialia rufa*; *Aphodius foetidus*.

**Ruling**

- (1) Under the plenary powers:
  - (a) the specific name *scybalarius* Fabricius, 1781, as published in the binomen *Scarabaeus scybalarius*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
  - (b) it is hereby ruled that the following specific names are not invalid:
    - (i) *rufus* Moll, 1782, as published in the binomen *Scarabaeus rufus*, by reason of being a junior primary homonym of *Scarabaeus rufus* De Geer, 1778;
    - (ii) *rufus* Fabricius, 1792, as published in the binomen *Scarabaeus rufus*, by reason of being a junior primary homonym of *Scarabaeus rufus* De Geer, 1778 and of *S. rufus* Moll, 1782.
- (2) The following names are hereby placed on the Official List of Specific Names in Zoology:
  - (a) *rufus* De Geer, 1778, as published in the binomen *Scarabaeus rufus* and as defined by the male lectotype in the Swedish Museum of Natural History, Stockholm, designated by Holm (1994);
  - (b) *rufus* Moll, 1782, as published in the binomen *Scarabaeus rufus* (not invalid by reason of being a junior primary homonym of *Scarabaeus rufus* De Geer, 1778);
  - (c) *rufus* Fabricius, 1792, as published in the binomen *Scarabaeus rufus* and as defined by the lectotype in the Zoological Museum, University of Copenhagen, designated by Landin (1956) (not invalid by reason of being a junior primary homonym of *Scarabaeus rufus* De Geer, 1778 and of *S. rufus* Moll, 1782);
  - (d) *foetidus* Herbst, 1783, as published in the binomen *Scarabaeus foetidus*.
- (3) The name *scybalarius* Fabricius, 1781, as published in the binomen *Scarabaeus scybalarius* and as suppressed in (1)(a) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

**History of Case 2878**

An application for the conservation of the specific names of *Scarabaeus rufus* Moll, 1782, *S. rufus* Fabricius, 1792 and *S. foetidus* Herbst, 1783 was received from Dr Frank-Thorsten Krell (*Theodor-Boveri-Institut für Biowissenschaften der Universität, Würzburg, Germany*), Dr Zdzisława Stebnicka (*Polish Academy of Sciences, Institute*

of *Systematics and Evolution of Animals*, Krakow, Poland) and Dr Erik Holm (University of Pretoria, Pretoria, South Africa) on 16 February 1993. After correspondence the case was published in BZN 51: 121–127 (June 1994). Notice of the case was sent to appropriate journals.

Landin (1956, 1957) had pointed out both the nomenclatural difficulties inherent in the present case and the best pragmatic solution, but he never applied to the Commission (para. 3 of the application). Some 20 years later, in 1979, an application was received from Dr Z. Stebnicka to conserve the names *Aphodius rufus* (Moll, 1782), *Aegialia rufa* (Fabricius, 1792) and *Aphodius foetidus* (Herbst, 1783) by suppressing *Scarabaeus scybalarius* Fabricius, 1781. After a long delay the case was published in BZN 41: 265–266 (November 1984) but was not proceeded with because there was at that time some doubt over the availability of *Dischista rufa* (De Geer, 1778). Stebnicka's proposals were the course which had been advocated by Landin, and the current application reiterated the same.

Although *Dischistus rufus* (De Geer, 1778), *Aphodius rufus* (Moll, 1782) and *Aegialia rufa* (Fabricius, 1792) were primary homonyms in *Scarabaeus*, the three species have not been treated as congeneric for 150 years (para. 8 of the current application).

Following publication of the current application in June 1994, alternative proposals by Dr Giovanni Dellacasa (*Genoa, Italy*) and by Dr Hans Silfverberg (*Zoological Museum, Helsinki University, Finland*) were published in BZN 51: 340–341 (December 1994) and 52: 71–72 (March 1995) respectively. Replies by two authors of the application, Drs F.-T. Krell and Z. Stebnicka, were published in BZN 52: 72–73.

The application was sent to the Commission for voting on 1 September 1995. The proposals received a majority of the votes cast (15 in favour, 10 against; two Commissioners did not vote) but failed to reach the two-thirds majority required for approval. Voting against, Lehtinen commented on his voting paper: 'As *Scarabaeus scybalarius* Fabricius, 1781 is an available name and the species is defined by an existing lectotype, and *S. rufus* Moll, 1782 has no preserved original material and the name is also both a junior synonym of *S. scybalarius* and a junior primary homonym of *S. rufus* De Geer, 1778, then only the choice of the name *S. scybalarius* can be recommended for this species. Names are often incorrectly used but the results of careless work by early authors can be and should be corrected when essential information is available to a reviser. Junior primary homonyms can be conserved in exceptional circumstances but I cannot accept this in the case of repeated homonymy in *Scarabaeus*. Since the nomenclatural clarification of the taxa involved (Silfverberg, 1977, 1979), a number of authors have used either the specific name *spissipes* LeConte, 1878 or *rufina* Silfverberg, 1977 in place of *S. rufus* Fabricius, 1792. I am in favour of the retention of *S. foetidus* Herbst, 1783 but this can be done without Commission intervention'.

A comment from Dr Przemyslaw Szwalko (*Agricultural University, Kraków, Poland*), published in BZN 53: 123–124 (June 1996), supported the conservation of the specific name of *Aphodius rufus* (Moll, 1782), despite it being a junior primary homonym of *Dischistus rufus* (De Geer), and of *A. foetidus* (Herbst, 1783). He proposed, however, that the name *Aegialia spissipes* should be adopted in place of *A. rufa* (Fabricius, 1792).

A further comment from Dr Krell, published in BZN 53: 124–125, and a comment from Dr David Král (*Charles University, Praha, Czech Republic*), published in BZN 53: 191 (September 1996), supported the original application. Dr Krell provided further evidence (54 references since 1990) of the continued extensive usage of *Aphodius rufus* (Moll, 1782).

In a further comment (BZN 54: 48–49; March 1997) Dr Dellacasa proposed the use of *Aphodius scybalariae* (Fabricius, 1781) in place of *A. foetidus*, and the adoption of *A. arcuatus* (Moll, 1785) in place of *A. rufus* (Moll, 1782).

Dr Dellacasa and Dr Szwalko provided schemes of nomenclature which were in partial agreement with the application. Dr Krell pointed out (BZN 52: 72) that some aspects of Dr Dellacasa's schemes had not been adopted by any author. Dr Silberberg's scheme followed the individual provisions of the Code but did not maintain stability of established nomenclature. Under the Byelaws the application was sent for a revote. It was noted on the voting paper that, because the case involved several taxonomic species and even more names, there were a considerable number of possible or partial solutions, only two of which appeared tenable: (a) the proposals in the application, based on the long usage of names and the dual sense of the name *scybalarius*, and (b) the strict application of the individual provisions of the Code. Both solutions included the placing of the specific names *rufus* De Geer, 1778 and *foetidus* Herbst, 1783 on the Official List. Under (a), *rufus* Moll, 1782 and *rufus* Fabricius, 1792 would be placed on the Official List; under (b), *rufus* Moll and *rufus* Fabricius would be replaced by the specific names of *Scarabaeus scybalariae* Fabricius, 1781 (in the taxonomic sense of *Aphodius rufus* (Moll, 1782) rather than that of *A. foetidus* (Herbst, 1783)) and of *Aegialia spissipes* LeConte, 1878. The proposals in the application required a two-thirds majority in the revote.

### Decision of the Commission

On 10 September 1997 the members of the Commission were invited to revote on the proposals published in BZN 51: 124–125. At the close of the voting period on 10 December 1997 the votes were as follows:

Affirmative votes — 17: Bock, Bouchet, Brothers, Cocks, Cogger, Heppell, Kerzhner, Kraus, Macpherson, Mahnert, Martins de Souza, Mawatari, Nielsen, Nye, Patterson, Song, Štys

Negative votes — 8: Dupuis, Eschmeyer, Kabata, Lehtinen, Minelli, Papp, Savage and Schuster.

Ride was on leave of absence.

Papp commented: 'I am almost always in favour of the concept of 'names in use'. However, I think that this case is an exception. I found Dr Lehtinen's comment on his earlier voting paper convincing. If conservation of the name *rufus* Moll, 1782 were so important, why have specialists not designated a neotype to define the taxon?'

### Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

*foetidus*, *Scarabaeus*, Herbst, 1783, *Achiv der Insectengeschichte*, 4: 7.

*rufus*, *Scarabaeus*, De Geer, 1778, *Mémoires pour servir à l'histoire des insectes*, vol. 7, pp. 640, 946.

- rufus*, *Scarabaeus*, Fabricius, 1792, *Entomologia systematica ...*, vol. 1, part 2, p. 39.  
*rufus*, *Scarabaeus*, Moll, 1782, *Neues Magazin für die Liebhaber der Entomologie*, 1(4): 372.  
*scybalarius*, *Scarabaeus*, Fabricius, 1781, *Species insectorum*, vol. 1, p. 16.

The following is the reference for the designation of the lectotype of *Scarabaeus rufus* De Geer, 1778:

**Holm, E.** 1994. *BZN* 51: 122.

The following is the reference for the designation of the lectotype of *Scarabaeus rufus* Fabricius, 1792:

**Landin, B.O.** 1956. *Opuscula Entomologica*, 21: 223.